In 2008, the Washington State Department of Agriculture awarded $324,013 to 10 projects:

Organization: Washington Apple Commission

Project Title: *Retail Layout Design, Merchandising and Handling Techniques for Washington State Fruits in India*

Award Amount: ($29,500)

Project Abstract: India is among the most important and fastest growing market for the Washington fruit industry. Washington Apples and Northwest pears are now widely available in all the major metropolitan cities. However, it has been identified that additional growth will happen by improving the display and product appeal in the existing markets and expanding to new cities. Trade responses and analysis show that a major increase in volume will happen when smaller cities that have high disposable incomes also start to handle Washington Apples. The retail infrastructure for fresh produce in India at present is quite poor. Most of the sales still happen from wet markets and small street side vendors. However, the retail landscape in India is undergoing a revolution and a number of large Indian companies are setting up organized retail chains and new supermarkets can be seen across the country. The smaller and medium cities are now getting the first imprints of modern retailing. However, counter sales staff of the newly developed supermarkets greatly lack in knowledge about handling a high value perishable produce like Washington Apples. The ongoing trade education efforts of the merchandisers have focused on creating awareness about variety and health attributes of Washington Apples. That training has been felt to be insufficient for the long term although it helps the retailers on the spot for a short-term education on handling, display, storage and other technical aspects associated with Washington Apples. A requirement has been identified to impart technical training to produce handling personnel and management of retail outlets and wholesalers on how to handle, display, store high value perishable products in general and Washington Apples in particular and also make additional revenue by promoting it to the consumers.

Organization: Northwest Agriculture Business Center

Project Title: *Greenbank Community Supported Agriculture Learning Center Project*

Award Amount: ($40,700)

Project Abstract: This proposal supports an island-wide 18 week Community Supported Agriculture (CSA) learning center based on a Washington farm with 100 subscribers each paying $500 per season. It is the first of its kind in the region. This is envisioned as a multi-year project. Each year a team of 8-10 new farmers will be taught to farm on 1/*2* acre of land at Greenbank Farm. The training for the CSA farming will be conducted by Tilth, Washington State University Extension (WSU), and Northwest Agriculture Business Center. This new farmer team will have all the support they need to be successful and learn to love farming. Long time local farmers and WSU have offered to support this with their time and talents. Grads of the first year program can continue on site for another year with further support. The primary goals of this project are to encourage more new farmers in Washington, increase our state food capacity, supply community food banks and emergency feeding centers, and deepen the relationships of local agricultural groups to enhance our food systems. All this 'hands on' education will be provided at the historic Greenbank Farm, with its central location, underutilized farmland, and ample building space and community resources.

Organization: Washington State Fruit Commission

Project Title: *Consumer Promotions of Washington Apricots in Mexico*

Award Amount: ($25,000)

Project Abstract: In 2002, the Mexican market opened to Washington apricots. The Washington State Fruit Commission (WSFC) has grown this market to just under the 64,000 box mark over the past six seasons. Mexico imports 3.4 million boxes of pears and 8.8 million boxes of apples annually from the US. This proposal is targeted at building consumer demand for Washington apricots to educate the Mexican consumer about our apricots and to conduct new consumer-focused marketing programs that will create greater preference for Washington State agricultural export food products (Washington apricots) in Mexico. These promotion strategies will include in-store demonstrations, consumer educational leaflets, and point of sale materials. Mexico is considered an emerging market and its middle-class population is experiencing an increase in their per capita purchasing power. Now is the time to build awareness of our Washington products and become an expected annual experience to enjoy our fruits.

Organization: Washington State Fruit Commission

Project Title: *Consumer Promotions of Washington Cherries in Mexico*

Award Amount: ($20,000)

Project Abstract: Mexico, an emerging market, has a greatly expanding middle-class population with significant per capita purchasing power. Now is the time to target market penetration as the new middle-class growth consumer is experiencing new products that they may not have been able to afford a few years ago. For Washington fresh cherries, Mexico is a market with untapped potential. In 2005, tariffs and trade barriers were decreased by the Mexican Economy allowing free access for cherries produced in Washington. This project is targeted at acquiring more Washington state representation and to conduct consumer-focused marketing programs that will create greater preference for Washington agricultural export food products, Washington cherries, in Mexico. Promotional strategies will focus on in-store demonstrations and consumer educational leaflets. To maintain the viability of the fresh sweet cherry industry of Washington State, it is important to begin now to build new markets and increase current market share around the world.

Organization: Pear Bureau Northwest

Project Title: *Putting a Face on USA Pears – Washington Pear Growers Short Film Series on usapears.org*

Award Amount: ($7,500)

Project Abstract: Now more than ever, consumers want to know where their food comes from. This is particularly true for fresh fruits and vegetables. To help address this consumer demand, Pear Bureau Northwest aims to produce a series of 3 – 5 short films showcasing pear growers from Washington's renowned Wenatchee, Yakima, and mid-Columbia pear growing regions. These films will be spotlighted on the home page of usapears.org, and will also be distributed via popular social networking sites like YouTube. In addition, the films would be made available to partners like the WSDA, who share in the mission of promoting the producers and products of the bountiful Pacific Northwest. The content of the films will spotlight the wide diversity of Washington's growers, depicting growers (and grower families) of differing ethnicities, genders, ages, and personalities. The films will tout the benefits of USA Pears through the interesting stories of these growers, and will encourage consumers to insist on USA Pears at their local retailer.

Organization: Pacific Coast Cranberry Foundation

Project Title: *Assuring Washington Cranberry Growers access to Genetically Pure and Uniform Germplasm*

Award Amount: ($32,100)

Project Abstract: The global demand for cranberries has markedly increased and Washington is well poised to be very competitive on the world economy. However, Washington has the lowest yield of all cranberry producing areas, largely due to contamination of plantings with non-productive germplasm. Growers are currently unable to procure productive germplasm that is not at risk of being contaminated. Proposed, by Pacific Coast Cranberry Foundation (PCCF), is a project that will provide access and availability of DNA-pure and uniform cranberry germplasm to Washington growers. From this they can develop their propagation beds and thus assure that the industry can be competitive over the next 20 years.

Organization: Washington Seed Potato Commission

Project Title: *Stem Number, Tuber Set and Size Distribution Relationships for Specialty Potato Cultivars*

Award Amount: ($18,000)

Project Abstract: Tuber set and size distribution can be optimized for a particular market by manipulating the average number of stems per seedpiece (i.e. the degree of apical dominance) without affecting overall yield (Knowles and Knowles, 2006). The number of stems per seedpiece increases with the physiological age of a seed lot, which in turn increases with the accumulation of degree days during maturation of seed-tubers in the field (post vine kill) and in storage. Since the values of seed, fresh-market and processing potatoes are dictated in part by the specific array of tuber size classes, manipulating tuber size profiles through varying the physiological age of seed lots has the potential to significantly affect returns. The aging responses of seed-tubers to degree days in storage and the target stem number for a particular size distribution are cultivar-dependent. Recommendations for handling and storage of russet skin processing cultivars to produce optimum stem numbers and tuber size distributions were recently determined by researchers at WSU. The industry has indicated a need to complete similar research for specialty potato cultivars that are important to the fresh market industry in WA. Accordingly, this research will characterize stem number tuber set relationships and will identify target stem numbers and associated handling and storage protocols to optimize tuber size distribution and maximize value for selected specialty cultivars.

Organization: Washington State University

Project Title: *Sustainable Biological Disease Management to Replace Methyl Bromide Fumigation in Washington's Christmas Tree Seedling Industry*

Award Amount: ($53,529)

Project Abstract: Nursery production of Douglas-fir *(Pseudo/sugo menziesii)* seedlings is heavily reliant on methyl-bromidec fumigation to mitigate the detrimental effects of soil-borne fungal diseases. Without fumigation, up to 50% of harvested seedling must be culled due to disease effects, while only 10% of seedlings are culled from methyl bromide-treated fields. Increasing pressure to discontinue use of methyl-bromide means new methods for disease control are urgently required. *Brassica* seed meals and green manures in combination with pathogen suppressive inoculants or composts offer high potential to solve this problem. Biological control of soil-borne pathogens is specific to soil type, crop and initial soil microbial community. Therefore the development of a quick-test protocol for biological control treatments will benefit not only the Douglas-fir industry but many other systems as well.

Organization: Washington State Potato Commission

Project Title: *Washington Potato Industry Food Safety Initiative*

Award Amount: ($53,443)

Project Abstract: The WSPC will create a comprehensive food safety program for the Washington State potato industry. This comprehensive program will include the creation of a specific food safety guidance document for potatoes, farm employee training materials including brochures and videos in English and Spanish, a template for standard operating procedures, signage for farm use, step by step instructions on what documentation needs to be in place for becoming USDA GAP certified, funds to partially reimburse growers the cost of a food safety audit, and farmer training workshops.

Organization: Washington State University

Project Title: *Development of a Food Safety Microbial Assessment of Risk and Food Safety Education for the Fresh Apple Industry*

Award Amount: ($44,241)

Project Abstract: Produce food safety has emerged as a critical agricultural issue. Washington apple sales alone top $2 billion dollars, emphasizing the importance of this commodity to the state's economy. Potential industry losses associated with a food safety incident are predicted at 20-25% of the revenue stream. The purpose of this project is to engage the Washington apple industry in developing a microbial food safety risk assessment, collect appropriate microbiological data for the risk assessment and conduct educational outreach to the apple industry.